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PUBLIC HEALTH ASPECTS OF THE COST OF LIVING.

Important changes in the level of prices occur during and after every great war. As a consequence, there is a shift in the value of the dollar. This fact has serious bearings on the public health situation. When a dollar buys less goods, many persons have to go without some of the necessities of life, or in other ways must lower their standard of living unless there is a corresponding increase in wages to make up for the lower purchasing power of the dollar. It is, therefore, of great interest to workers in public health to know the facts of wages and prices and to see how the changes in these two factors are related to one another. If the increase in wages has kept pace with the increase in prices, then the community is as well off. If, on the other hand, wages have not kept pace with prices, there is economic retrogression which, ultimately may show itself in higher sickness and death rates.

Complete facts on wages and prices are not at hand. A good collection of data on wages is available for wage-workers in New York State, and on prices of commodities in the United States. The table on page 2 shows the relation of the two to one another, taking June, 1914 as the base.

So far as wage earners in New York State are concerned, the rise in wages, especially during recent months, has kept pace with and has done even a little better than the increase in the price of food. But, food is not the only item of expense; it makes up, in fact, only about two-fifths of the workingman's budget. Retail prices of other commodities are not available. Wholesale prices of a series of important commodities in the United States indicate a considerably greater increase than the increase in wages. In March, 1920, wages in New York State showed an increase of 119 per cent. over June, 1914; but, during the same time, wholesale prices increased 156 per cent. Prices appear, therefore, to have increased faster than wages and to that extent work people are somewhat worse off. There are, of course, striking exceptions in certain industries and in certain localities.

Average Weekly Earnings in Factories of New York State, Index Numbers for Retail Food Prices and Wholesale General Commodity Prices in the United States. (June, 1914 = 100)

Period	Average Weekly Earnings in New York State Factories[1]	United States	
		Retail Food Prices[1]	Wholesale Commodity Prices[2]
June, 1914	100	100	100
Whole years:			
1914	98	105	101
1915	101	102	102
1916	114	115	125
1917	129	147	178
1918	160	170	198
1919	185	188	214
Months:			
January, 1920	209	203	251
February, 1920	208	202	252
March, 1920	219	202	256

[1]From *Labor Market Bulletin*, New York State Industrial Commission, Albany, February, 1920, page 5, and manuscript sources.

[2]From *Monthly Labor Review*, United States Bureau of Labor Statistics, February, 1920, page 89. The following groups of commodities are included in this wholesale price index: farm products; foods; cloths and clothing; fuel and lighting; metals and metal products; lumber and building materials; chemicals and drugs; house furnishings; miscellaneous articles.

It has been noted, however, in previous post-war periods that there is a tendency of wages to approach commodity prices and we may expect a similar adjustment on this occasion. After the Civil War, wages continued to rise long after the cost of living had reached its maximum; that is, the wage index remained high for some time after the cost of living and price figures had begun to decline. Whether wages or prices in the present cycle will continue to increase, it is impossible to predict with accuracy. There have been hopeful attempts to deal with certain unwholesome aspects of the price situation. The solution of this problem will depend, as always, upon increased production and increased economy accompanied by more efficient distribution of the products.

The public health worker is obviously interested in the above insofar as it affects the vitality of the population. Up to the present, however, the mortality statistics reveal no evil effects. If anything, health conditions throughout the country appear to be better than before the war. Last year was a record-breaking year for low mortality rates, and the prospect for this year is also encouraging. Much good has undoubtedly followed from the health educational and food conservation propaganda of various governmental and private agencies during the war. Not only was the public instructed in the substitution of cheaper foods for the more expensive ones, but incidentally also on the principles of diet and other hygienic matters. In par-

ticular the dietary standards of Southern wage earners must have improved remarkably in recent years, if the death rate for pellagra—a "deficiency disease"—is any index. After rising to a maximum of 6.7 per 100,000 in the Industrial experience of the Metropolitan in 1915, the rate declined to 2.3 per 100,000 in 1919, the lowest figure on record in this particular experience for pellagra. Southern wage earners have apparently been able to raise their food standards of living; it is likely that here, too, the improvement is due, at least in part, to education. In the northern cities, where standards have more likely been somewhat lowered, there is no evidence as yet of any ill effects. Health officers will do well to keep informed on this phase of their local health conditions and to participate in any efforts which will favorably affect the housing and nutrition problems of their respective communities.

SUMMER DROWNING.

Deaths from accidental drowning reach their maximum during the summer months. In the State of New York alone, there were 844 deaths from drowning in 1919, and more than three-quarters occurred during the five months from May to September inclusive, that is, during the vacation season when water traffic, particularly pleasure traffic, was at its height. Figures for other States show the same conditions.

Among Industrial policy-holders in the Metropolitan Life Insurance Company, 8,854 deaths from drowning occurred during the nine years from 1911 to 1919. About three-quarters of them were among boys and young men under 25 years of age. In the age period 15 to 19 years, the death rate for drowning among white males was 31 per 100,000 living; which is a higher death rate than for all the acute respiratory conditions combined at this time of life. Very high rates also prevail among colored boys and young men. Among girls and young women, drowning are about one-tenth as frequent.

In view of these facts and, because of the early approach of the summer season, it is important to emphasize the necessity for precautions and safeguards against drowning. Health officers, educators and police officials should recognize more fully their responsibility to prevent unnecessary deaths from this cause. This is especially important in communities where summer resorts or bathing beaches are numerous. Local authorities should cooperate more fully with the American Red Cross Life Saving Corps in their vicinity. There are now 98 such local life saving stations in various parts of the United States and their membership is steadily increasing. Several expert life savers are on the staff of the Red Cross and act as

instructors and organizers. At these stations, facilities are provided for safeguarding human life by teaching precautions that should be observed in the water and the necessary preventive measures to avoid water accidents. Swimming and boat-handling are taught. So are methods of rescuing those in peril of drowning. Instruction in ways of inducing artificial respiration and of resuscitating persons apparently drowned is also given.

The American Red Cross Life Saving Corps has a supply of very valuable posters which should be displayed for the instruction of swimmers and canoeists. They have also for distribution instructive leaflets which every swimmer and others who enjoy water sports should read. It is recommended that correspondence with the American Red Cross officials at Washington be had in order to establish local facilities where none now exist and in other ways to obtain the help of this splendidly equipped organization during the coming summer.

PUBLIC HEALTH DURING THE FIRST QUARTER OF 1920.

The public health situation of the first quarter of 1920 may be reviewed as follows:

The first weeks of the new year continued the remarkably low mortality experience of the last six months of 1919. For all causes of death, and for the more important specific causes, the rates were much below the seasonal average of many previous years. To be sure, infectious diseases, including measles, scarlet fever, whooping cough, diphtheria and, even smallpox, were prevalent in many places; but, not to such an extent as to disturb the favorable rate of total mortality.

Virulent influenza accompanied by pneumonia was reported from the West about the middle of January. The disease was soon afterward reported to be epidemic in many other places in the United States and in foreign countries. By the middle of February, the peak week had been reached for the country at large. From that time onward, the cases and deaths rapidly declined and normal conditions for this season were again attained with but few isolated exceptions by the middle of March. Certain cities which had suffered comparatively low death rates during the pandemic in 1918 were hit more severely in this 1920 recrudescence, and others which had almost catastrophic experiences in 1918, were but lightly affected by this re-appearance of the disease. Another characteristic of this epidemic was the shorter period of its development and decline in most places, in contrast with the more extended duration of the 1918 invasion. The attack was also of much lighter virulence, except in a few instances. The *excess* mortality based upon the

experience among the Industrial policy-holders of this Company was only 8 per cent. of that suffered from the epidemic of 1918.

Throughout February and March, local epidemics of the acute infectious diseases of children continued with new foci pretty generally distributed throughout the country. The smallpox situation attracted wide attention, but was most serious in the Province of Ontario. Other smallpox reports came from such widely scattered cities as Newark, New Orleans, Dallas, Detroit, Salt Lake City, Denver, Lincoln, Neb., and from other localities, especially in the South where whole States, such as Mississippi and Alabama were disturbed by often virulent outbreaks of the disease. In several cases, strong opposition to vaccination was experienced by health officers.

As an offset to these unfavorable features in the mortality of the first quarter, we note lower death rates from typhoid fever, tuberculosis of the lungs, cerebrospinal meningitis, diarrhea and enteritis, suicides, homicides and accidental violence than in corresponding quarters of 1918 and 1919. The rate from tuberculosis of the lungs, especially, both among white and colored lives, maintained the very favorable condition noted in 1919. It is encouraging also to find that the death rate among colored people, as indicated by the experience among the large number of such persons insured in this Company, was favorable for this season of the year, especially in view of the prevalence of the acute respiratory diseases and the influenza epidemic. The total death rate for colored lives, 19.1 per 1,000, was lower than that for the same three months of 1918, when a rate of 19.4 was experienced.

A detailed statement of the conditions actually registered is shown in the table on page 6.

Survey of Public Health Literature During First Quarter, 1920.

A feature of the public health literature of the first quarter of the year was the discussion of the problems centering around the mortality of women in childbirth and the welfare of infants. The importance of prenatal work as a feature of public health service is becoming generally recognized. Health officers emphasize the preventability of much maternal mortality. Others note especially the causes of stillbirths and the unnecessarily high death rate in the first month of life. In Huddersfield, England, pregnancies have been reported on a voluntary basis as an approach to more complete prenatal service and the plan is meeting with more and more success. Such a plan could readily be undertaken by American communities where prenatal service is either now available or contemplated. A report by the Children's Bureau on the various aspects of illegit-

Death Rates per 100,000 Years of Life Exposed. First Quarters of 1918, 1919 and 1920 Compared. By Color, for Principal Causes of Death. Metropolitan Life Insurance Company, Industrial Department.

Cause of Death	Death Rate per 100,000					
	White			Colored		
	Jan. to Mar., 1920	Jan. to Mar., 1919	Jan. to Mar., 1918	Jan. to Mar., 1920	Jan. to Mar., 1919	Jan. to Mar., 1918
All causes of death	1273.0	1486.0	1131.9	1906.1	2036.9	1939.8
Typhoid fever	4.3	4.6	6.4	8.6	9.1	16.6
Measles	14.4	3.1	12.5	3 7	2.0	7.2
Scarlet fever	8.8	4.9	6.2	....	.6	.3
Whooping cough	9.1	3.8	8.8	8.9	2.8	12.7
Diphtheria and croup	29.7	24.6	23.5	6.5	7.1	8.4
Influenza	158.4	298.1	16.6	221.4	331.0	42.2
Tuberculosis (all forms)	134.1	157.7	170.8	301.1	310.4	395.0
Tuberculosis of the lungs	121.4	144.2	155.4	278.1	287.7	366.0
Tuberculous meningitis	6.2	6.1	8.4	4.7	7.6	7.5
Other forms of tuberculosis	6.5	7.5	6.9	18.3	15.0	21.4
Meningitis—total	6.8	8.7	10.3	8.4	6.2	10.6
Cerebrospinal meningitis	5.5	7.3	6.1	7.3	5.9	6.3
Cerebral hemorrhage; apoplexy	68.1	63.8	68.3	93.4	97.4	103.7
Organic diseases of heart	142.2	137.1	144.7	194.9	195.7	219.5
Total respiratory diseases	258.7	289.5	185.6	417.3	416.8	379.0
Bronchitis	14.2	13.1	13.7	18.8	14.7	20.8
Bronchopneumonia	74.7	72.9	44.3	87.7	84.1	62.1
Pneumonia—lobar and undefined	155.8	192.1	117.6	292.0	300.7	277.1
Other diseases of respiratory system	14.0	11.5	10.0	18.8	17.3	19.0
Diarrhea and enteritis	9.2	10.2	12.4	10.2	12.7	12.1
Under 2 years	4.1	4.4	4.9	3.9	2.3	3.3
2 years and over	5.1	5.8	7.5	6.3	10.5	8.7
Nephritis and Bright's disease	86.5	86.8	99.6	147.8	141.9	182.4
Total puerperal state	31.6	29.0	18.8	35.8	28.9	28.9
Puerperal septicemia	8.3	5.7	8.6	14.7	10.2	12.1
Puerperal albuminuria and convulsions	4.8	5.8	4.4	6.3	5.7	7.2
Other diseases of puerperal state	18.5	17.5	5.8	14.9	13.0	9.6
Total external causes*	58.8	120.2	88.5	86.1	129.1	125.7
Suicides	5.1	7.5	7.1	3.4	4.8	6.0
Homicides	2.8	3.4	4.1	17.8	28.6	26.5
Accidental and unspecified violence†	50.0	60.1	69.4	64.1	69.4	91.4
Accidental drowning	2.1	‡	‡	2.4	‡	‡
Automobile accidents	5.6	‡	‡	2.6	‡	‡
War deaths	.8	49.2	7.9	.8	26 3	1.8
All other and ill-defined causes of death	252.4	244.0	258.8	361.9	345.2	395.6

* Includes "war deaths"
† Excludes "war deaths"
‡ Data unavailable

imacy in the United States indicates a promising field for the conservation of infant life. The infant mortality rate among children born out of wedlock is three times that occurring in the country at large.

The health center idea is being spread widely in the United States under the stimulating guidance of the American Red Cross. In New York State, it is the purpose of the Department of Health to establish such health centers generally in rural areas. Other isolated communities both in the East and in the West have flourishing health centers or are planning to develop them. One town in Wisconsin, at present without any medical service, has adopted the health center idea and, in addition, this novel plan: a physician is to be appointed who will be director of the health center, health supervisor of the schools and sanitary advisor to the local government. He may also practice his profession. The community will guarantee the physician a fixed salary and will otherwise make the conditions of life attractive to him, furnish him with a rent-free house and transportation. This plan will undoubtedly appeal to other state health departments where there is a large rural population and a lack of medical facilities at the present time.

There is also evident a growing appreciation of the value of health work for school children. In Great Britain, the plan has been developed much further than in the United States. In that country, it is now proposed to have continuous health supervision of the child, beginning with the prenatal clinic. A continuous record is to be kept from the moment of birth through the period of preschool life, of grade schools, secondary schools, and, in fact, throughout all the years of childhood and of adolescence. In the United States, the Children's Bureau is fostering the same plan. Rhode Island seems to be the first State which has definitely committed itself to such work, beginning with the registration of the birth and continuing throughout the school life of the child. It is planned to turn over a complete health record of the child to the school authorities when the latter is entered at school.

From European sources, the most interesting health news concerns the activities of the League of Red Cross Societies. Efforts are being extended to control the widespread typhus fever epidemics. The use of serum is apparently meeting with some degree of success. The deplorable conditions of health among children and old people in the various parts of the central European states call for continuous relief from America.

Important scientific contributions are coming with increasing frequency from the Medical Research Committee of Great Britain, which recently has been given more power and is to be known as the

Medical Research Council. Dr. Leonard Hill, in his monograph on the science of ventilation and open-air treatment of respiratory diseases, lays stress on the protective effects of the secretions of the nose and throat. Dr. John Brownlee's studies in the epidemiology of phthisis are noteworthy.

The last monograph received from the Council, Number 48, is a study of the cases of fever of undetermined nature in the British forces; the authors concluded that from 5 to 7 per cent. were mild and unrecognized cases of typhoid infections, notwithstanding typhoid fever vaccinations. They found no evidence that there was any tendency to the establishment of the carrier condition.

TUBERCULOSIS AND RACE STOCK.

The most striking fact in the statistics of tuberculosis in the United States is the difference between the mortality rates of white and colored persons. Whether we study the records of the Registration Area, or the statistics of mortality among Industrial policyholders of the Metropolitan Life Insurance Company, the fact is much the same. The death rate from pulmonary tuberculosis among colored people in the United States is between two and one-half and three times that of white persons at all ages. When a more refined analysis is made, it is found that at certain age periods, such as childhood and early adolescence, the mortality among colored persons from this disease is between nine and ten times that of the white. With advancing age, the differences between the two races become less marked. In many communities of the United States, the tuberculosis situation is acute because of the large number of tuberculous negroes. Little has been done to control this condition among colored people who, because of the excessive prevalence of the disease among them, are a constant menace not only to other members of their race, but to the whites as well,

These facts have been known for many years, but only recently have we learned to appreciate the significance of the race factor with reference to tuberculosis among the various white stocks of foreign origin in the United States. Mortality studies for Pennsylvania and New York recently published* show that very different conditions prevail among those born in various countries but living in these two States. The lowest rates in general appear to occur among persons born in the United States. Those born in Russia, who, in these States are, for the most part, Jews, enjoy very low rates. The Italians and those who were born in the former Austro-

*Dublin, Louis I., and Baker, Gladden W. "The Mortality of Race Stocks in Pennsylvania and New York." *Quarterly Publications* of the American Statistical Association, March, 1920. Reprinted by Metropolitan Life Insurance Company, New York City, and may be obtained upon request to the Company.

Hungarian Empire also show comparatively low tuberculosis death rates. At some of the age periods, the rates among these foreign-born persons were even lower than for the native-born. On the other hand, very unfavorable rates prevail among those born in Ireland, and residing in New York or Pennsylvania. Irish born males and females suffer extraordinarily from this disease during the greater part of life. At ages 25 to 44 years, the rate for Irish males is almost twice as high as for the native, and in the age period 45 to 64 years, the excess is even greater. The figures for this race were higher than those prevailing in their native country for the corresponding age periods. German and British-born males also show much higher tuberculosis rates than were found to prevail among persons born in the United States.

In their attack on this disease, health officers should keep the race factor in mind, especially where there is a large foreign population. Special measures of control should be applied where high death rates are known to prevail among the several race-stocks in a given locality. Not so much effort need be expended, perhaps, among such people as the Jews and Italians where conditions are, on the whole, favorable although even among them considerable life saving could be accomplished through public health work.

MORTALITY RECORD OF APRIL, 1920.

A decline of 30 per cent. is shown in the total death rate for the month of April. There was a substantial reduction in the rate for practically every cause of death shown in the table on page 10. The most important downward movement occurred in the rates for influenza and the pneumonias. The four principal infectious diseases of children also had lower death rates in April than in March.

The influenza death rate declined 73 per cent. over the figure for March. It should be remembered, however, that among the deaths recorded for this disease in the month, a considerable number actually occurred in March and a few in February when the epidemic prevailed.

Accompanying the decline in the influenza and pneumonia rate, there was a reduction in the death rates for Bright's disease, organic diseases of the heart, and for diseases and conditions relating to the puerperal state. The record of the month is, on the whole, most satisfactory.

METROPOLITAN LIFE INSURANCE COMPANY

Death Rates per 100,000 for Principal Causes, Premium Paying Business in Industrial Department.

MONTHS OF MARCH AND APRIL, 1920.

CAUSES OF DEATH	RATE PER 100,000 LIVES EXPOSED		
	April, 1920	March, 1920	Year 1919
Total—all causes	1085.6	1554.4	1041.4
Typhoid fever	3.3	3.8	7.1
Measles	13.3	19.5	3.5
Scarlet fever	7.0	9.8	3.8
Whooping cough	6.6	10.1	3.1
Diphtheria	19.7	24.1	20.5
Influenza	61.5	224.1	94.1
Tuberculosis (all forms)	163.0	177.2	150.5
Cancer	66.5	73.1	66.4
Meningitis (all forms)	7.2	7.2	6.6
Cerebral hemorrhage	65.0	76.0	57.9
Organic diseases of heart	130.4	164.5	111.7
Pneumonia (all forms)	124.6	275.3	117.5
Other respiratory diseases	24.2	33.9	17.2
Diarrhea and enteritis	12.0	11.6	16.6
Bright's disease	77.7	89.1	72.2
Puerperal state	21.9	35.2	19.2
Suicides	5.9	4.8	6.6
Homicides	4.4	3.8	6.7
Other external causes (excluding suicides and homicides)	52.1	53.4	78.0
Traumatism by automobile	8.1	3.6	10.6
All other causes	219.3	258.1	182.4

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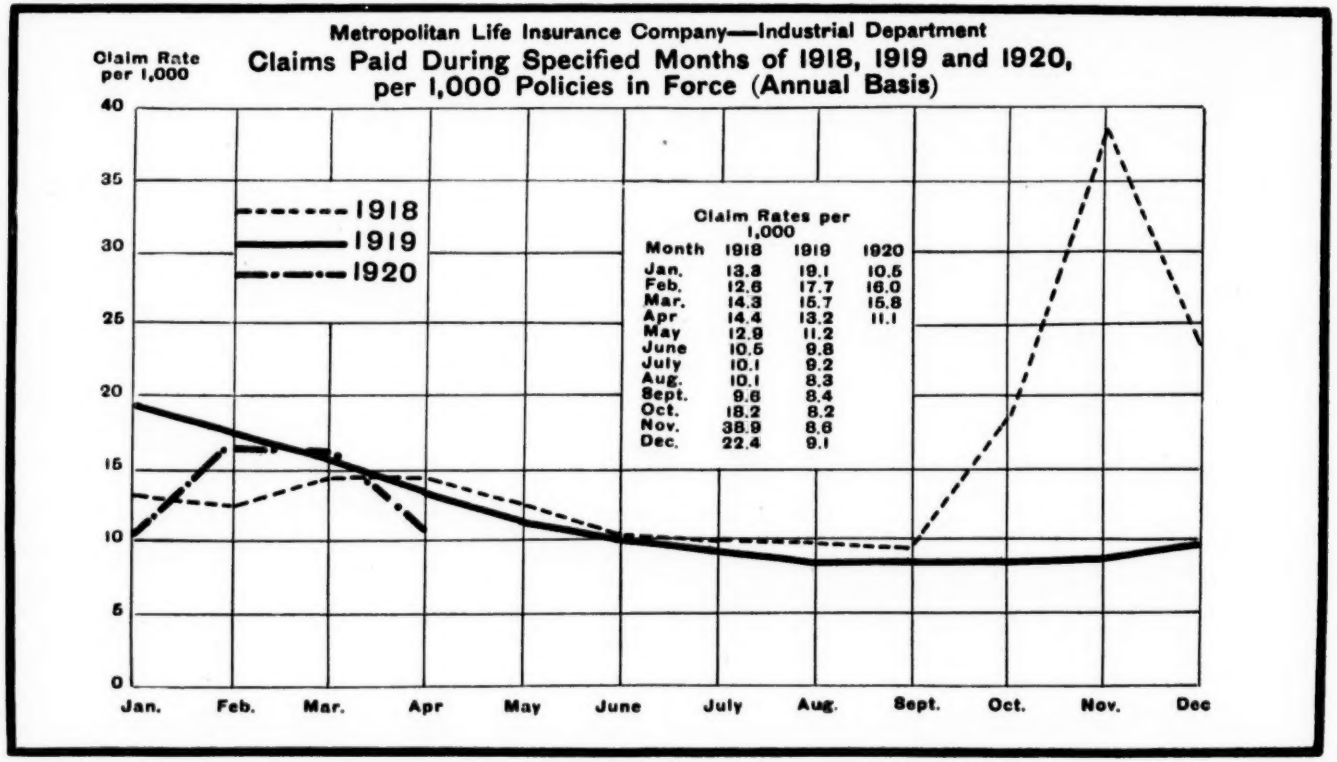

Claim Rates per 1,000

Month	1918	1919	1920
Jan.	13.3	19.1	10.5
Feb.	12.6	17.7	16.0
Mar.	14.3	15.7	15.8
Apr	14.4	13.2	11.1
May	12.9	11.2	
June	10.5	9.8	
July	10.1	9.2	
Aug.	10.1	8.3	
Sept.	9.6	8.4	
Oct.	18.2	8.2	
Nov.	38.9	8.6	
Dec.	22.4	9.1	